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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/825,078 | 04/03/2001 | Roberto DeLima | RSW92000141US1 | 9743 |

7590 09/20/2004

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| EXAMINER |
|---|
| BRUCKART, BENJAMIN R |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2155 | |

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/825,078 | DELIMA ET AL. | |
| | Examiner | Art Unit | |
| | Benjamin R Bruckart | 2155 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *30 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☒ Claim(s) *16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

### *Detailed Action*

Claims 1-51 are pending in this Office Action.

### *Formal Drawings*

The formal drawings received on 7/30/01 have been entered.

### *Specification*

The disclosure is objected to because of the following informalities: Page 1, paragraph 1, related inventions have blank underscored lines that must be filled in. Page 16, line 16;

Appropriate correction is required.

### *Claim Objections*

Claims 16-18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 16. See MPEP § 608.01(n).

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-4, 12-18, 34, 35 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,768,738 by Yazaki et al.**

Regarding claim 1, a method of providing improved quality of service over a series of related messages exchanged between computers in a networking environment (Yazaki: col. 3, lines 34-45), comprising steps of:

determining one or more transactional quality of service ("TQoS") values to be applied to the related messages (Yazaki: col. 4, lines 15-51; col. 5, lines 18-30);

using the determined TQoS values to transmit at least one of the related messages for delivery to a particular one of the computers (Yazaki: col. 5, lines 18-44); and

annotating selected ones of the related messages with information reflecting the determined TQOS values (Yazaki: col. 5, lines 18-44).

Regarding claim 2, the method according to claim 1, wherein one of the TQoS values is a transmission priority value to be used when transmitting the annotated messages (Yazaki: col. 5, lines 18-30).

Regarding claim 14, the method according to claim 2, further comprising the step of using the transmission priority value to prioritize the transmission of the at least one transmitted message through the networking environment (Yazaki: col. 5, lines 18-31; priority control for the transfer).

Regarding claim 3, the method according to claim 1, wherein one of the TQoS values is available bandwidth information pertaining to a network connection to the particular computer (Yazaki: col. 3, lines 36-52; flow detection).

Regarding claim 13, the method according to claim 3, further comprising the step of enforcing bandwidth allocation using the available bandwidth information as the at least one transmitted message is transmitted through the networking environment (Yazaki: col. 20, lines 56- col. 21, line 17).

Regarding claim 4, the method according to claim 1, further comprising the step of storing the determined TQoS values for use when transmitting subsequent ones of the related messages to the particular computer (Yazaki: col. 4, lines 7-14, lines 40-51; Figure 25, tag 2511).

Regarding claim 12, the method according to claim 1, wherein the using step further comprises using the determined TQoS values to set markings in a network layer header of the transmitted annotated messages (Yazaki: col. 5, lines 17-44).

Regarding claim 15, the method according to claim 4, wherein the storing step stores the determined TQoS values in a server computer (Yazaki: col. 4, lines 40-51; router serves packets for many terminals; Figure 2).

Regarding claim 16, the method according to claim 2 or claim 3, wherein the annotating step further comprises storing the information reflecting the determined TQoS values as part of a routing token in the annotated messages (Yazaki: col. 4, lines 40-51).

Regarding claim 17, the method according to claim 16, wherein the routing token is used to modify a Uniform Resource Locator from a header of selected ones of the related messages (Yazaki: col. 13, lines 1-8, 27-55).

Regarding claim 18, the method according to claim 17, wherein the routing token further comprises information enabling identification of the particular computer and another computer which performs the transmitting step (Yazaki: col. 8, lines 33-47; Source IP and Desintation IP), as well as identification of a storage area used to store the determined TQoS values for the related messages (Yazaki: col. 4, lines 15-38; header Figure 9; tags 511, 507).

Regarding claim 35, a system for providing improved quality of service for transmission of related request and response messages exchanged between computers in a networking environment (Yazaki: col. 3, lines 34-45), comprising:

means for determining one or more quality of service ("QoS") values to be applied to transmission of the related messages (Yazaki: col. 4, lines 15-51; col. 5, lines 18-30); and

means for communicating the QoS values to be applied to the transmission by storing the determined QoS values in headers of selected ones of the request and response messages (Yazaki: col. 5, lines 18-44).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 6-11, 34 are rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Patent No. 6,768,738 by Yazaki et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al.**

Regarding claim 7,

The Yazaki reference teaches the method according to claim 1.

The Yazaki reference does not explicitly state the message is a response.

The Ben-Shaul et al references at least one of the messages is a response that serves a Web page to the particular computer (Ben-Shaul: page 1, para 7 and 8).

The Ben-Shaul reference further teaches the invention improves end to end delivery of content over the internet (Ben-Shaul: page 1, para 5).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of improved quality of service over a series of related messages exchanged between computers as taught by Yazaki while employing

responses as taught by Ben-Shaul in order to improve end to end delivery of content over the internet (Ben-Shaul: page 1, para 5).

Claims 5-6, 8-11 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Yazaki and Ben-Shaul et al.

Regarding claim 8, the method according to claim 1, wherein at least one of the annotated messages is a request from the particular computer for a Web page (Yazaki: col. 1, lines 13-17; packet is a message; Ben-Shaul: page 1, para 8).

Regarding claim 9, the method according to claim 1, wherein at least one of the annotated messages is a request from the particular computer for a Web object (Yazaki: col. 1, lines 13-17; packet is a message; col. 2, lines 12-26; terminals are computers; Ben-Shaul: page 1, para 8).

Regarding claim 5, the method according to claim 1, wherein the particular computer is a client computer and the using step transmits one of the annotated messages to the client computer (Yazaki: col. 4, lines 12-15; packets connection between terminals; a computer is a terminal), and further comprising steps of:

receiving the transmitted annotated message at the client computer (Yazaki: col. 3, lines 1-15); and

automatically returning the TQoS values to a server computer in each subsequent one of the related messages (Ben-Shaul: page 1, para 8; Yazaki: col. 4, lines 15-51; TOS values are stored in the header of packets, packets are the requests and are replied with the object).

Regarding claim 6, the method according to claim 5, wherein the transmitted annotated message includes an object reference that is annotated to carry the TQoS values (Yazaki: col. 18, lines 17-43; SAMAC source address of message, object; DAMAC is destination

object), and wherein the automatically returning step is enabled by the annotation of the object reference (Yazaki: col. 5, lines 18-44).

Regarding claim 10, the method according to claim 5, wherein at least one of the annotated messages is a response that serves a Web page to the particular computer and wherein at least one of the subsequent ones of the related messages is a request for information referenced by the Web page (Ben-Shaul: page 1, para 8).

Regarding claim 11, the method according to claim 5, wherein at least one of the annotated messages is a response that serves a Web page to the particular computer and wherein at least one of the subsequent ones of the related messages is a request for information selected from the Web page by a user of the particular computer (Ben-Shaul: page 1, para 8).

Regarding claim 34,

The Yazari reference teaches the system according to claim 22, wherein:

the TQoS values comprise at least (1) a transmission priority value to be used when transmitting the annotated messages (Yazaki: col. 5, lines 18-31; priority control for the transfer) and (2) available bandwidth information pertaining to a network connection to the particular computer (Yazaki: col. 3, lines 36-52; flow detection); and

wherein the means for using the determined TQoS values further comprises using the determined TQoS values, to prioritize transmission of the packet to enforce bandwidth allocation using the available bandwidth information as the packet is transmitted (Yazaki: col. 5, lines 18-31).

The Yazaki reference further teaches does not explicitly state a cache.

The Ben-Shaul reference teaches at least one of the message is a response that serves a Web object to the particular computer from a network cache (Ben-Shaul: page 1, para 7-8).

The Ben-Shaul reference further teaches the invention improves end to end delivery of content over the internet (Ben-Shaul: page 1, para 5).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of improved quality of service over a series of related messages exchanged between computers as taught by Yazaki while employing a cache as taught by Ben-Shaul in order to improve end to end delivery of content over the internet (Ben-Shaul: page 1, para 5).

**Claim 36 is rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Patent No. 6,768,738 by Yazaki et al in view of U.S. Patent No 5,907,547 by Foladare et al.**

Regarding claim 36,

The Yazaki reference teaches the system according to claim 35 where QoS values are stored in the headers of packets.

The Yazaki reference does not explicitly state cookies.

The Foladare reference teaches values are stored as cookies in the headers (Foladare: col. 7, lines 45-65).

The Foladare reference further teaches the cookie downloaded in the packet creates a connection (Foladare: col. 7, lines 45-65).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of improved quality of service over a series of related messages exchanged between computers as taught by Yazaki while employing cookies in the headers as taught by Foladare in order to create a connection briding two terminals (Foladare: col. 7, lines 45-65).

While the examiner understands the difference between a method, system and computer program product, the examiner equates the method to the code, hardware, and actions of which invention runs. Therefore parallel claims are drawn between similar claims with different preambles (drawn below) and are rejected based on basis as described above.

| | | |
|---|---|---|
| 1 | 19 | 37 |
| 2 | 20 | 38 |
| 3 | 20 | 38 |
| 4 | 21 | 39 |

| | | |
|---|---|---|
| 5 | 22 | 40 |
| 6 | 23 | 41 |
| 7 | 24 | 42 |
| 8 | 24 | 42 |
| 9 | 24 | 42 |
| 10 | 25 | 43 |
| 11 | 26 | 44 |
| 12 | 27 | 45 |
| 13 | 28 | 46 |
| 14 | 29 | 47 |
| 15 | 30 | 48 |
| 16 | 31 | 49 |
| 17 | 32 | 50 |
| 18 | 33 | 51 |
| | 34 | |

**Therefore:**

**Claims 19-21, 37-39; 27-33, 45-51 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,768,738 by Yazaki et al.**

**Claims 23-26, 41-44, are rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Patent No. 6,768,738 by Yazaki et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al.**

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number is (703) 305-0324 until 10/27/2004 and 571-272-3982 after. The examiner can normally be reached on 8:00-5:30 PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (703) 308-6662 until 10/27/2004 and 571-272-3978 after. The fax phone numbers for the organization where this application or

proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0324 until 10/27/2004 and 571-272-3982 after.

Benjamin R Bruckart
Examiner
Art Unit 2155

brb
September 16, 2004

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER